

SOUTHERN SOUTHEAST ALASKA COHO SALMON ESCAPEMENT ESTIMATION, 1988

By

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ABSTRACT

Coho salmon escapements were surveyed and enumerated in streams throughout southern Southeast Alaska by foot and helicopter during Fall 1988. Foot or helicopter surveys were conducted during September 15-October 31 on 46 streams. The Hugh Smith Lake adult weir was operated throughout the coho salmon migration during which a total of 513 age .1 fish and 56 jacks (age .0) was enumerated. The 1988 count for Hugh Smith Lake was the lowest escapement count of age .1 fish recorded since the weir was first operated in 1982. Overall, the weakness observed in 1988 coho salmon escapements, as compared with prior years, reflected the same pattern as poor commercial and sport catches. A total of 7,189 coho salmon smolts was counted, tagged and released at the Hugh Smith Lake smolt weir during April 21 - June 11, 1989.

KEY WORDS: Coho salmon, escapement, surveys, indicator stock, Southeast Alaska.

INTRODUCTION

Southern Southeast Alaska coho salmon stocks provide an important contribution to ocean and inshore fisheries in Southeast Alaska and northern British Columbia. Information on the escapement status and contributions of natural stocks in southern Southeast is essential for development of realistic management arrangements under the U.S./Canada Pacific Salmon Treaty.

The almost total lack of escapement information on the heavily harvested southern Southeast coho salmon stocks has caused concern to fishery managers for many years. That concern was the impetus for establishment of an increased escapement survey program beginning in 1987. Results from 1987 surveys were reported by Elliott et al. 1988. This current report summarizes the results of coho salmon escapement surveys and weir counts in southern Southeast Alaska in 1988. Also included is a summary of the Spring 1989 smolt tagging project at Hugh Smith Lake.

METHODS AND PROCEDURES

Escapement surveys were conducted by foot and helicopter. Foot surveys were conducted by walking the length of streams to their headwater spawning areas and counting fish in pools, along banks and on spawning beds. An attempt was made to time surveys so that the maximum (peak) number of fish was available for counting. This usually occurred after most fish had entered the stream from saltwater but before most had begun spawning.

Helicopter surveys were conducted from an altitude of 6-50 m unless obstructions required flying higher. Airspeed varied from approximately 5-50 km per hour depending on terrain, visibility and the presence or absence of fish. Helicopter surveys were conducted from Bell 206 B Jet Ranger and Hughes 500 helicopters. The door on the observer's side was removed and the helicopter was maneuvered so that the observer was able to look down into the stream continuously from the left side. The observer wore polarized glasses to reduce reflective glare and a billed hat to keep prop wash out of the observer's eyes.

An adult salmon weir was operated at Hugh Smith Lake during June 1 - October 20. Returning coho salmon were sampled for age and length and the presence or absence of tags.

An outmigrant smolt weir was operated at the outlet of Hugh Smith Lake during April 21 - June 11, 1989. Outmigrating fish were enumerated. Coho and Sockeye smolts were sampled for age-weight-length. All coho smolts were anesthetized, coded-wire tagged and released.

RESULTS AND DISCUSSION

A total of 76 streams in southern Southeast was surveyed by foot, helicopter, airplane or boat during 1988 (Table 1). Of these, foot or helicopter surveys were also conducted during September 15-October 31 on a total of 46 streams.

A total of 303 adult coho salmon (age .1) was counted at the Hugh Smith Lake weir. In addition, 180 fish that were holding downstream of the weir were estimated to have passed during a 7.5 hour period when the pickets were pulled because of flooding on September 29. Thirty adults were still holding downstream

when the weir was removed on October 20. Overall, a total of 513 adults (age .1) and 57 jacks was counted.

A total of 7,189 coho smolts was enumerated, tagged (code 04-27-18) and released at Hugh Smith Lake during April 21 - June 11, 1989. In addition, 427,366 sockeye smolts, 116 steelhead smolts, 1,536 Dolly Varden and 41 cutthroat trout were counted.

LITERATURE CITED

- Elliott, S.T. and K.J. Kuntz. 1988. A study of coho salmon in Southeast Alaska: Chilkat Lake, Chilkoot Lake, Yehring Creek, and Vallenar Creek. Alaska Department of Fish and Game, Sport Fish Division, Fishery Data Series No. 62, Juneau.

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| STREAM NUMBER | STREAM NAME | YEAR | DATE | DIST- ANCE | TYPE | MOUTH | TIDAL | LIVE | DEAD | TOTAL COUNT | V | W | OBS. | REMARKS |
|------------------------|----------------------|-----------------------|-------|---------------------------|------|--------|-------|----------|------|----------------|---|---|------|-----------------------|
| 101-45-038 | SALT CHUCK GEORGE IN | 1988 | 07/13 | 0.5 | A | | | | | | | N | N | JPV NO FISH SEEN |
| 101-45-078 | CARROLL CREEK | 1988 | 10/11 | 1.5 | F | | | 193 | | 193 | N | N | SHH | 20 WERE JACKS |
| 101-47-015 | WARD CREEK | 1988 | 10/05 | 2.0 | F | | | 15 | | 15 | N | H | DJH | |
| | | | 10/14 | 2.0 | F | | | 53 | 1 | 54 | P | N | LMJ | 1 DOLLY VARDEN |
| | | | 10/27 | 2.0 | F | | | 72 | | 72 | N | L | DJH | |
| 101-55-020 | WILSON RIVER | 1988 | 10/11 | L | H | | | | | | | P | N | JFK |
| 101-55-040 | BLOSSOM RIVER | 1988 | 10/11 | L | H | | | 790 | | 790 | E | L | JFK | |
| 101-71-004 | CHICKAMIN RIVER | 1988 | 09/25 | L | A | | | 300 | | 300 | N | N | PD | INDIAN CREEK |
| | | | 10/25 | L | H | | | 50 | | 50 | N | N | JFK | BARRIER CREEK |
| | | | 10/25 | L | F | | | 200 | | 200 | E | N | PD | INDIAN CREEK |
| | | | 10/25 | L | H | | | 85 | | 85 | N | N | JFK | MAIN PORTION OF RIVER |
| 101-71-028 | WALKER CREEK | 1988 | 10/12 | L | F | | | 50 | | 50 | P | N | PD | |
| 101-71-063 | PORTAGE CREEK | 1988 | 10/11 | L | H | | | | | | | N | L | JFK |
| ----- | | | | | | | | | | | | | | |
| DISTANCE: I=INTERTIDAL | | SURVEY TYPE: A=AERIAL | | V=VISIBILITY: E=EXCELLENT | | W=WEIR | | H=HIGH | | | | | | |
| M=MOUTH | | H=HELICOPTER | | P=POOR | | | | L=LOW | | | | | | |
| L=LENGTH | | F=FOOT | | N=NORMAL | | | | N=NORMAL | | | | | | |
| MILES (TENTHS) | | W=WEIR | | | | | | | | | | | | |
| | | B=BOAT | | | | | | | | | | | | |

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| STREAM NUMBER | STREAM NAME | YEAR | DATE | DIST- ANCE | TYPE | MOUTH | TIDAL | LIVE | DEAD | TOTAL COUNT | V | W | OBS. | REMARKS |
|------------------|-----------------|------|-------|---------------|------|-------|-------|------|------|----------------|---|---|------|-------------------------|
| 101-75-005 | HERMAN CREEK | 1988 | 09/25 | L | A | | | 30 | | 30 | N | N | PD | |
| | | | 10/25 | 3.0 | F | | | 72 | | 72 | E | L | DJH | |
| 101-75-010 | GRANT CREEK | 1988 | 09/25 | L | A | | | 150 | | 150 | N | N | PD | |
| 101-75-015 | EULACHON RIVER | 1988 | 09/25 | L | A | | | 100 | | 100 | N | N | PD | |
| | | | 10/25 | 3.0 | F | | | 205 | | 205 | N | H | SH | 32 ABOVE BARRIER (10%J) |
| 101-75-030 | UNUK RIVER | 1988 | 10/25 | L | H | | | | | | N | N | JFK | CRIPPLE CREEK |
| | | | 10/25 | L | H | | | | | | N | N | JFK | GENE'S LAKE CREEK |
| | | | 10/25 | L | H | | | | | | N | N | JFK | KERR CREEK |
| | | | 10/25 | L | H | | | 25 | | 25 | N | N | JFK | KINGSBURY CREEK |
| | | | 10/25 | L | H | | | 5 | | 5 | N | N | JFK | LAKE CREEK |
| | | | 10/25 | L | H | | | | | | N | N | JFK | SAWMILL CREEK |
| 101-75-050 | KLAHINI RIVER | 1988 | 10/25 | L | H | | | 20 | | 20 | N | N | JFK | |
| 101-75-085 | INDIAN CREEK | 1988 | 10/12 | L | F | | | 200 | | 200 | P | N | PD | |
| 101-80-052 | MARGARITA CREEK | 1988 | 10/13 | 0.5 | B | | | 320 | | 320 | N | N | DB | EGG TAKE/FRED DIV FISH |
| 101-80-068 | WOLVERINE CREEK | 1988 | 12/08 | 0.2 | F | | | 200 | | 200 | N | N | TZ | LK OUTLET/SPAWNING |

DISTANCE: I=INTERTIDAL
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MILES (TENTHS)

SURVEY TYPE: A=AERIAL
H=HELICOPTER
F=FOOT
W=WEIR
B=BOAT

V-VISIBILITY: E=EXCELLENT
P=POOR
N=NORMAL

W-WATER: H=HIGH
L=LOW
N=NORMAL

Table 1. (page 4 of 12)

| STREAM NUMBER | STREAM NAME | YEAR | DATE | DIST- ANCE | TYPE | MOUTH | TIDAL | LIVE | DEAD | TOTAL COUNT | V | W | OBS. | REMARKS |
|------------------|---------------------|------|-------|---------------|------|-------|-------|------|------|----------------|---|---|------|--------------------|
| 101-80-070 | HATCHERY CK-YES BAY | 1988 | 10/01 | L | F | | | 12 | | 12 | N | H | TZ | |
| | | | 10/10 | L | F | | | 175 | 1 | 176 | N | N | JFK | |
| | | | 10/20 | L | F | | | 700 | 100 | 800 | N | N | TZ | |
| | | | 12/07 | L | F | | | 365 | 1 | 366 | N | N | TZ | |
| 101-90-029 | TRAITORS COVE CREEK | 1988 | 10/10 | L | A | | | 1 | | 1 | E | L | DJH | |
| 101-90-050 | NAHA RIVER | 1988 | 08/25 | L | W | | | 69 | | 69 | N | N | JK | WEIR PULLED AUG 25 |

DISTANCE: I=INTERTIDAL
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MILES (TENTHS)

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F=FOOT
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B=BOAT

V-VISIBILITY: E=EXCELLENT
P=POOR
N=NORMAL

W=WATER: H=HIGH
L=LOW
N=NORMAL

Table 1. (page 5 of 12)

| STREAM NUMBER | STREAM NAME | YEAR | DATE | DIST- ANCE | TYPE | MOUTH | TIDAL | LIVE | DEAD | TOTAL COUNT | V | W | OBS. | REMARKS |
|------------------|------------------|------|-------|---------------|------|-------|-------|------|------|----------------|---|---|------|-----------------------|
| 102-30-087 | AIKEN COVE | 1988 | 10/17 | L | F | | | 75 | | 75 | E | L | JFK | 100 DOLLY VARDEN |
| 102-40-060 | LAGOON CREEK | 1988 | 09/16 | L | F | | 10 | 45 | | 55 | N | N | PD | |
| | | | 10/14 | L | F | | | 70 | | 70 | N | N | PD | |
| 102-60-072 | TWELVEMILE CREEK | 1988 | 10/25 | 1.5 | F | | | 43 | | 43 | N | H | GF | |
| 102-60-082 | HARRIS RIVER | 1988 | 10/20 | 1.0 | F | | | 12 | | 12 | P | H | GF | COHO HOLDING IN POOL |
| 102-60-084 | MAYBESO CREEK | 1988 | 10/29 | 2.0 | F | | | 6 | | 6 | N | N | GF | COHO HOLDING IN POOLS |
| 102-60-087 | KARTA RIVER | 1988 | 08/25 | L | W | | | 823 | | 823 | N | N | JK | WEIR PULLED AUG 25 |

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P=POOR
N=NORMAL

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L=LOW
N=NORMAL

Table 1. (page 6 of 12)

| STREAM NUMBER | STREAM NAME | YEAR | DATE | DIST- ANCE | TYPE | MOUTH | TIDAL | LIVE | DEAD | TOTAL COUNT | V | W | OBS. | REMARKS |
|------------------|---------------------|------|----------------|---------------|--------|-------|-------|--------|------|----------------|--------|--------|------------------|-------------------------------|
| 103-40-013 | SODA CREEK | 1988 | 10/11 10/12 | 1.0 L | F F | | | | | | | | N H DR N N DR | |
| 103-40-035 | NATZUHINI NE CORNER | 1988 | 11/01 | 0.6 | F | | | 19 | | 19 | P | H | GF | COHO IN POOLS |
| 103-60-047 | KLAOCK RIVER | 1988 | 10/14 | L | W | | | 4,970 | | 4,970 | N | N | SH | CUMULATIVE THRU 11/28 |
| 103-60-059 | PORT ST NICKOLAS HD | 1988 | 10/10 10/28 | 0.1 1.4 | F F | | | 1 6 | | 1 6 | P N | N N | GF GF | JACK COHO HOLDING IN POOLS |
| 103-90-030 | STANEY CREEK | 1988 | 10/14 | 2.0 | F | | | 37 | | 37 | P | H | GF | 28 WERE JACKS |

DISTANCE: I=INTERTIDAL
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MILES (TENTHS)

SURVEY TYPE: A=AERIAL
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B=BOAT

V=VISIBILITY: E=EXCELLENT
P=POOR
N=NORMAL

W=WATER: H=HIGH
L=LOW
N=NORMAL

Table 1. (page 7 of 12)

| STREAM NUMBER | STREAM NAME | YEAR | DATE | DIST- ANCE | TYPE | MOUTH | TIDAL | LIVE | DEAD | TOTAL COUNT | V W OBS. | REMARKS |
|------------------|----------------------|------|-------|---------------|------|-------|-------|------|------|----------------|----------|-------------------------|
| 105-32-012 | IRISH CREEK-ROCKY P | 1988 | 09/19 | L | A | | | | | | P H WB | NO ACTION ABOVE FALLS |
| 105-32-073 | 3 MILE ARM NW ARM HD | 1988 | 10/28 | 1.0 | F | | | 158 | | 158 | E N RCL | +21 JACKS, NONE ABV BRG |
| 105-43-002 | SHIPLEY BAY LK CK | 1988 | 08/24 | L | A | | 4 | | | 4 | P N WB | N. SHORE OF LAKE |

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B=BOAT

V=VISIBILITY: E=EXCELLENT
P=POOR
N=NORMAL

W=WATER: H=HIGH
L=LOW
N=NORMAL

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| STREAM NUMBER | STREAM NAME | YEAR | DATE | DIST- ANCE | TYPE | MOUTH | TIDAL | LIVE | DEAD | TOTAL COUNT | V | W | OBS. | REMARKS |
|---|----------------------|---|----------------------------------|---|------------------|--------------------------------------|-------|--------------------|------|--------------------|---|--|--------|---|
| 106-10-034 | LUCK CREEK LUCK LAKE | 1988 | 09/06 | L | F | | | | | | | | E L WB | |
| 106-22-006 | FLAT CK MOSMAN INLET | 1988 | 09/19 10/12 10/27 | L L L | F F F | | | 11 1 | | 11 1 | | N N DAH N L RT N N RCL | | VERY FEW FRY IN STREAM +16 OTHER-JACKS, TROUT? |
| 106-22-016 | NAVY CK | 1988 | 09/14 10/03 10/27 | L L L | F F F | | | 26 14 | 2 | 26 16 | | N N TWR N L BLL N N RT | | |
| 106-41-010 | SALMON BAY CREEK | 1988 | 09/13 | L | W | | | 572 | | 572 | | N N NCR | | PLUS 172 JACKS |
| 106-41-030 | RED LAKE CREEK | 1988 | 09/07 09/07 09/16 09/16 | L 0.5 .3 0.3 | F F F F | | | 45 2 10 6 | | 45 2 10 6 | | N L WB N L WB N N TWR N N TWR | | LAKE OUTLET NORTH LAKE INLET NO COHO INLET OR OUT |
| 106-41-032 | RED LAKE HEAD | 1988 | 09/07 | L | F | | | | | | | N L RT | | |
| 106-41-034 | BIG CK RED BAY | 1988 | 09/07 09/16 10/28 | 0.4 .5 2.0 | F F F | | | 28 38 | 1 | 28 39 | | E N WB N N TWR E N WB | | ALL IN LOWER 0.1 MILE +100 YDS ABV BRIDGE +21 JACKS, 25 DOLLIES |
| ----- | | | | | | | | | | | | | | |
| DISTANCE: I=INTERTIDAL M=MOUTH L=LENGTH MILES (TENTHS) | | SURVEY TYPE: A=AERIAL H=HELICOPTER F=FOOT W=WEIR B=BOAT | | V-VISIBILITY: E=EXCELLENT P=POOR N=NORMAL | | W-WATER: H=HIGH L=LOW N=NORMAL | | | | | | | | |

Table 1. (page 9 of 12)

| STREAM NUMBER | STREAM NAME | YEAR | DATE | DIST- ANCE | TYPE | MOUTH | TIDAL | LIVE | DEAD | TOTAL COUNT | V | W | OBS. | REMARKS |
|------------------|--------------------|------|-------------------------|-------------------|-------------|-------|-------|-------------|------|----------------|-------------|-------------|-------------------|--|
| 106-41-055 | TOTEM CREEK | 1988 | 09/07 | 1.5 | F | | | 34 | | 34 | N | N | DAH | |
| 106-41-058 | ZIM CK TOTEM BAY | 1988 | 09/07 | 1.5 | F | | | 9 | | 9 | N | N | DAH | |
| 106-42-010 | KAH SHEETS CREEK | 1988 | 09/06 09/07 | 1.0 L | F F | | | 12 | | 12 | N | N | DAH N L RCL | ITZ TO FALLS LAKE INLET ONLY |
| 106-44-006 | FALLS CK MITKOF IS | 1988 | 09/07 09/26 10/27 | 4.0 4.0 2.0 | F F F | | | 4 2 5 | | 4 2 7 | N N N | L N N | RGZ GDW RGZ | INDEX AREA BETWEEN BRG INDEX AREA ABOVE UPPER BRIDGE |
| 106-44-031 | CRYSTAL CREEK | 1988 | 10/27 | | W | | | 3,861 | | 3,861 | | | CLH | |
| 106-44-060 | PETERSBURG CREEK | 1988 | 08/30 09/07 | L L | A F | | | | | | | | N N WB N L RCL | |

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V-VISIBILITY: E=EXCELLENT
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W=WATER: H=HIGH
L=LOW
N=NORMAL

13

| STREAM NUMBER | STREAM NAME | YEAR | DATE | DIST- ANCE | TYPE | MOUTH | TIDAL | LIVE | DEAD | TOTAL COUNT | V | W | OBS. | REMARKS |
|------------------|----------------------|------|-------|---------------|------|-------|-------|------|------|----------------|---|---|------|------------------------|
| 107-30-030 | THOMS CREEK | 1988 | 09/06 | L | F | 20 | | | | 20 | N | L | RCL | |
| 107-30-070 | SNAKE CK OLIVE COVE | 1988 | 10/03 | L | H | | | 55 | | 55 | N | N | RCL | 50 BELOW RIFFLES 5 ABV |
| | | | 10/25 | L | H | | | 47 | | 47 | N | N | RCL | 2 ABV BRIDGE |
| | | | 11/25 | L | H | | | | | | P | N | RCL | FOG AND SNOW |
| 107-40-008 | PORTERFIELD CK GINIA | 1988 | 10/27 | L | A | | | | | | N | N | RCL | |
| 107-40-009 | GLACIER CK VIRGINIA | 1988 | 10/27 | L | A | | | | | | N | N | RCL | |
| 107-40-025 | OERNS CREEK | 1988 | 11/25 | L | H | | | 4 | | 4 | N | N | RCL | 2 EAGLES |
| 107-40-049 | HARDING RIVER | 1988 | 11/25 | L | H | | | | | | P | N | RCL | DARK WATER, NO EAGLES |
| 107-40-052 | BRADFIELD RIVER N FK | 1988 | 11/25 | L | H | | | 315 | | 315 | E | N | RCL | SAME AREA AS KINGS |
| 107-40-055 | EAGLE R BRADFIELD | 1988 | 11/25 | L | H | | | | | | N | N | RCL | DARK POOLS 1 EAGLE |
| 107-40-078 | EARL WEST CREEK | 1988 | 10/28 | L | F | | | 8 | 2 | 10 | N | N | RT | ABOVE BRIDGE |

DISTANCE: I=INTERTIDAL
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MILES (TENTHS)

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B=BOAT

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W=WATER: H=HIGH
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N=NORMAL

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| STREAM NUMBER | STREAM NAME | YEAR | DATE | DIST- ANCE | TYPE | MOUTH | TIDAL | LIVE | DEAD | TOTAL COUNT | V | W | OBS. | REMARKS |
|------------------|---------------------|------|-------|---------------|------|-------|-------|------|------|----------------|---|---|---------|------------------------|
| 108-10-005 | PAT CK WRANGELL IS | 1988 | 10/03 | L | F | | | | | | | | N N RT | ABOVE LAKE |
| 108-40-010 | NORTH ARM CREEK | 1988 | 08/16 | L | F | | | | | | | | N H DAH | |
| | | | 09/23 | 1.0 | A | | | | | | | | P L WB | |
| | | | 10/03 | L | H | | | 37 | | 37 | | | N N RCL | 30 UPSTREAM 7 LOWER |
| | | | 10/25 | L | H | | | 41 | | 41 | | | E N RCL | 15 UPPER POOL |
| | | | 11/25 | L | H | | | 2 | | 2 | | | N N RCL | LOW SUN ANGLE |
| 108-40-013 | SHAKES SLOUGH | 1988 | 10/03 | L | H | | | 2 | | 2 | | | N N RCL | MIDSTREAM |
| | | | 10/25 | L | H | | | 23 | | 23 | | | E N RCL | SAME POOL AS LAST YEAR |
| | | | 11/25 | L | H | | | | | | | | N N RCL | |
| 108-40-014 | KETILI CREEK BARNES | 1988 | 09/23 | L | A | | | | | | | | P L WB | |
| | | | 10/03 | L | H | | | | | | | | N N RCL | |
| | | | 10/25 | L | H | | | 7 | | 7 | | | N N RCL | 5 IN CK., 8 EAGLES |
| | | | 11/25 | L | H | | | 20 | 30 | 50 | | | N N RCL | 100 SWANS |
| 108-40-016 | KIKAHE RIVER | 1988 | 09/23 | 3.0 | A | | | 25 | | 25 | | | N L WB | GOING FOR THE GOLD |
| | | | 10/03 | L | H | | | 77 | | 77 | | | N N RCL | MIDSTREAM |
| | | | 10/25 | L | H | | | 44 | | 44 | | | E N RCL | MID TO UPPER STREAM |
| | | | 11/25 | L | H | | | 18 | | 18 | | | N N RCL | |
| 108-40-017 | GOAT CK STIKINE R | 1988 | 09/23 | 0.1 | A | | | 4 | | 4 | | | P L WB | SLIGHTLY GLACIAL |

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B=BOAT

V-VISIBILITY: E=EXCELLENT
P=POOR
N=NORMAL

W=WATER: H=HIGH
L=LOW
N=NORMAL

Table 1. (page 12 of 12)

| STREAM NUMBER | STREAM NAME | YEAR | DATE | DIST- ANCE | TYPE | MOUTH | TIDAL | LIVE | DEAD | TOTAL COUNT | V | W | OBS. | REMARKS |
|---|----------------------|------|-------|---------------|------|-------|-------|------|------|----------------|---|---|------|------------------------|
| 108-40-018 | SHUKTUSA BRANCH | 1988 | 10/03 | L | H | | | 80 | | 80 | N | N | RCL | LOWEST POOL |
| | | | 10/25 | L | H | | | 18 | | 18 | E | N | RCL | BEAVER POND AREA |
| | | | 11/25 | L | H | | | 5 | | 5 | N | N | RCL | NO ANIMAL OR BIRD SIGN |
| 108-40-020 | ANDREWS CREEK | 1988 | 08/16 | L | F | | | | | | N | N | TWR | |
| | | | 09/23 | L | A | 80 | | 120 | | 200 | E | L | WB | INC 20 @ ANDREWS SLU |
| | | | 10/03 | L | H | | 195 | 240 | | 435 | N | N | RCL | 195 BELOW FORKS |
| | | | 10/25 | L | H | | | 240 | | 240 | N | N | RCL | SCATTERED THROUGHOUT |
| | | | 11/25 | L | H | | | 23 | 7 | 30 | N | N | RCL | INC 7 N FORK |
| 108-40-040 | BLIND SLOUGH SUMNER | 1988 | 09/08 | 1.0 | F | | | 30 | | 30 | N | L | RGZ | |
| | | | 09/19 | 1.0 | F | | | 65 | | 65 | N | L | RGZ | |
| 108-40-050 | OHMER CREEK | 1988 | 09/08 | 2.0 | F | | | 1 | | 1 | N | L | RGZ | |
| | | | 09/19 | 2.0 | F | | 28 | 2 | | 30 | N | L | RGZ | |
| 108-40-13A | W OF HOT SPRINGS | 1988 | 08/16 | L | F | | | | | | N | H | RCL | |
| | | | 09/23 | L | A | | | 30 | | 30 | N | L | WB | |
| | | | 10/03 | L | H | | | 85 | | 85 | N | N | RCL | UPPER AREA ONLY |
| | | | 10/25 | L | H | | | 45 | | 45 | E | N | RCL | ABOVE LOGJAM |
| | | | 11/25 | L | H | | | 17 | | 17 | E | L | RCL | |
| 108-40-14E | MT GALLATIN CREEK | 1988 | 09/23 | 0.1 | A | | | | | | N | L | WB | |
| 108-50-003 | BEAR CK FREDERICK SD | 1988 | 09/16 | 3.0 | F | | | 142 | | 142 | N | L | RGZ | INC 3 CANYON CREEK |
| DISTANCE: I=INTERTIDAL SURVEY TYPE: A=AERIAL V=VISIBILITY: E=EXCELLENT W=WATER: H=HIGH M=MOUTH H=HELICOPTER P=POOR L=LOW L=LENGTH F=FOOT N=NORMAL N=NORMAL MILES (TENTHS) W=WEIR B=BOAT | | | | | | | | | | | | | | |

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